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Follow-up actions to the recommendations of the International Conference on Population and Development

World population monitoring, focusing on the contribution of the Programme of Action of the International Conference on Population and Development to the internationally agreed development goals, including the Millennium Development Goals

Report of the Secretary-General

Summary

In its decision 2007/1, the Commission on Population and Development decided that the special theme for its forty-second session would be the contribution of the Programme of Action of the International Conference on Population and Development to the internationally agreed development goals, including the Millennium Development Goals. The present report provides the basis for the Commission's deliberations.

The Programme of Action of the International Conference on Population and Development provides a comprehensive set of objectives and recommendations to improve human well-being and promote sustainable development and sustained economic growth. Its goals and objectives are consistent with other internationally agreed development goals and the actions it recommends fully support the attainment

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of those goals. The core of the Programme of Action includes guidelines on policies, programmes and measures that are directly related to population dynamics and influence the growth and structure of populations. The report focuses on how the implementation of those core guidelines and the actions they entail contribute to the achievement of the internationally agreed development goals, including the Millennium Development Goals.

The report was prepared by the Population Division of the Department of Economic and Social Affairs of the United Nations Secretariat.

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I. Introduction

1. The Programme of Action[1] of the International Conference on Population and Development provides a comprehensive set of objectives and recommendations to improve human well-being and promote sustainable development and sustained economic growth. Its goals and objectives are consistent with other internationally agreed development goals and the actions it recommends fully support the attainment of those goals, including the Millennium Development Goals.[2] The core of the Programme of Action includes guidelines on policies, programmes and measures that are directly related to population dynamics and influence the growth and structure of populations. The present report focuses on how those core guidelines and the actions they entail can contribute to the achievement of fundamental development goals.

2. Two of the major achievements of the twentieth century were the universal reduction of mortality and the ensuing reduction of fertility. In 1994, when the International Conference on Population and Development convened to consider the interrelations of population dynamics and sustainable development, there was no doubt that population growth was no longer the threat it had been when the first intergovernmental conference on population, the World Population Conference, had convened in 1974. In 1994, fertility had been declining for at least two decades in most countries of Asia and Latin America and the Caribbean and it was beginning to decline in several countries of sub-Saharan Africa. The annual population growth rate had dropped from its peak of 2.02 per cent in the years from 1965 to 1970 to 1.54 per cent and was definitely on the decline. A "population explosion" appeared to have been averted.

3. Today the global population growth rate is estimated to be even lower, at 1.17 per cent annually, and its continued decline is largely taken for granted. Yet, consideration of the population explosion that did not occur is instructive to underscore that there is still no time for complacency (see table 1). If fertility had remained constant in Asia at the level it had around 1970, its population in 2005 would have been 6.1 billion, close to the current population of the whole world. Because of the rapid reductions in fertility achieved by most countries in Asia, especially the most populous, the population of Asia in 2005 was instead 3.9 billion, 54 per cent lower than it would have been without a fertility decline. For Latin America and the Caribbean, the numbers are more moderate. Yet, without the rapid reduction in fertility it achieved, this major area would have had in 2005 a population 38 per cent larger than the one it actually achieved (769 million versus 558 million). The crucial finding is that, in the case of Africa, the difference in population between having had no reduction in fertility since 1970 (832 million) and that actually achieved (769 million) is very small, amounting to just 8 per cent of the current population. For the least developed countries, the difference is larger but also small, amounting to just 15 per cent of the 2005 population. These results imply that the population explosion was averted globally because fertility declined rapidly in Asia and Latin America and the Caribbean, but the explosion has largely played itself out in Africa and in most of the least developed countries. As the present report documents, rapid population growth is associated with a number of detrimental social and economic outcomes.

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[1] *Report of the International Conference on Population and Development, Cairo, 5-13 September 1994* (United Nations publication, Sales No. E.95.XIII.18).

[2] See E/CN.9/2005/6, sect. III.

Table 1
Population according to different scenarios by major area: 2005

	Medium variant	*Constant fertility since 1970*	*Difference in 2005*	*Percentage difference*
		(millions)		
Less developed regions	5 299	7 936	2 637	50
Least developed countries	767	882	115	15
Other less developed countries	4 532	7 054	2 522	56
Asia	3 938	6 079	2 141	54
Latin America and the Caribbean	558	769	211	38
Africa	769	832	62	8

4. The past four decades have shown that government policy and commitment can make an important difference in shaping population dynamics. The successes achieved would not be a reality without government commitment or the continuous engagement of the international community, as crystallized in the Programme of Action of the International Conference on Population and Development. Critical to the success of the Programme of Action is its emphasis on action based on fundamental rights and principles. Recognizing that respect for human rights underpins the attainment of development, the Programme of Action sets objectives and provides recommendations that are justifiable not only because they lead to development or have positive impacts on people's well-being, but also because they are an expression of the rights of the individual. Thus, the measures to advance gender equality and equity and the empowerment of women that the Programme of Action champions are as much a matter of rights as of development. Full implementation of the Programme of Action is all the more urgent today because the time to reach its objectives is running short and, as the present report documents, gaps in implementation are particularly common in low-income countries and among the poorer segments of society. Accelerating the implementation of the Programme of Action would not only contribute to achieving the internationally agreed development goals but would also ensure that all people enjoy fully their human rights.

II. Eradicating extreme poverty and hunger

A. Eradicating extreme poverty

5. The eradication of extreme poverty is a crucial development goal. To achieve the target of reducing by half the proportion of people living on less than $1 a day by 2015, policies that address directly the economic and social issues causing or perpetuating poverty are necessary. Yet, population policy can also make a major contribution to the eradication of poverty because population dynamics, economic change and social well-being are closely interlinked. Rapid population growth imposes increasing demands on existing resources and is associated with lower incomes. Thus, in 2005, the least developed countries had the lowest average per capita income and the fastest rate of population growth among development groups

(see table 2). In comparison, per capita income in the rest of the developing countries was four times as high and their population growth rate was half that of the least developed countries but had been declining rapidly since the 1970s. Developed countries as a group had the highest income per capita and a very low rate of population growth. Because most least developed countries are in Africa, the continent also had a low per capita income in 2005 and rapid population growth.

Table 2
Annual population growth rate, total fertility and GDP per capita by major area, 1995 and 2005

	Population growth rate (percentage)		*Total fertility (children per woman)*		*GDP per capita (USD, PPP)*	
Major area	*1990-1995*	*2005-2010*	*1990-1995*	*2005-2010*	*1990*	*2005*
More developed regions	.045	0.28	1.68	1.60	17 159	28 296
Less developed regions	1.83	1.37	3.42	2.75	2 119	5 181
Least developed countries	2.69	2.37	5.68	4.63	1 115	1 421
Other less developed countries	1.70	1.19	3.11	2.45	2 214	5 582
Africa	2.61	2.25	5.69	4.67	1 705	2 503
Asia	1.63	1.13	2.97	2.34	3 274	6 197
Latin America and the Caribbean	1.71	1.24	3.03	2.37	7 485	8 333
North America	1.08	0.25	1.99	2.00	23 268	40 631
Europe	0.20	-0.02	1.58	1.45	14 042	21 998
Oceania	1.62	1.21	2.48	2.30	23 310	25 296

Sources: United Nations Data Online (UNdata), accessed on 21 October 2008, and *World Population Prospects: The 2006 Revision* (United Nations publication, Sales No. E.07.XIII.2).
Abbreviations: GDP=gross domestic product, PPP=purchasing power parities, USD=United States dollars.

6. The majority of developing countries, which experienced rapid population growth after 1950 when mortality decreased long before their fertility began to decline, are grappling today with the challenge of providing decent employment for their rapidly growing populations of working age. In 2008, about 200 million persons were unemployed, an 18 per cent increase over 1995 levels.[3] The Programme of Action recognized that high population growth, generated by the lag between the decline in mortality and that in fertility, would increase the challenges faced by Governments in generating productive employment (para. 3.15).

7. The decline in fertility that is part of the demographic transition can increase national savings and economic growth by reducing the proportion of dependent children and increasing that of persons of working age, thus producing a "demographic dividend".[4] The decreasing dependency ratios that arise when fertility

[3] International Labour Organization, *Global Employment Trends* (Geneva, International Labour Office, 2008).

[4] Andrew Mason and Sang-Hyop Lee, "The demographic dividend and poverty reduction" in *Proceedings of the Seminar on the Relevance of Population Aspects for the Achievement of the Millennium Development Goals*, United Nations, New York, 17-19 November 2004.

decreases have contributed to the rise in per capita income and economic growth in countries as diverse as China, Egypt, Ireland, Japan, Sweden or the United States of America.[5] The medium-term effects of fertility reductions on economic growth in both developed and developing countries account for about 20 per cent of per capita output growth between 1960 and 1995.[6]

8. The newly industrializing countries of Eastern and South-Eastern Asia, in particular, experienced very fast fertility reductions after 1965 and have benefited from vigorous economic growth.[7] Major public investments in education coupled with a stable macroeconomic environment, economic growth that focused on job creation and institutions that promoted savings have been critical in allowing those countries to derive the full benefits associated with the demographic dividend. During the 1980s, about a third of the increase in per capita income in the newly industrializing countries of Eastern and South-Eastern Asia was due to the demographic dividend.[8] In contrast, economic growth has fallen short of its full potential in most countries in Latin America and the Caribbean that also experienced fast fertility declines.[9] These examples show that, although reductions in fertility can potentially accelerate economic growth, the realization of that potential depends on developing the right institutions and adopting appropriate economic and social policies, including measures to build human capital, generate jobs and improve income distribution.

9. Faster and sustained economic growth provides Governments with more leeway to combat poverty. High levels of poverty are associated with the persistence of high fertility. In 2005, developing countries with at least 40 per cent of their population living on less than $1 a day had an average fertility of 5.4 children per woman, more than double that of developing countries with poverty levels below 10 per cent (see table 3). The group of poorest countries also had a high population growth rate (2.5 per cent), more than triple that of countries with low poverty levels (0.7 per cent per year). The four poorest countries — Burundi, Liberia, Rwanda and the United Republic of Tanzania — each with a poverty level surpassing 75 per cent, also had a total fertility surpassing 6 children per woman and population growth rates surpassing 2.5 per cent.

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[5] David E. Bloom and David Canning, "Global demographic change: dimensions and economic significance", *Population and Development Review*, supplement to vol. 34, 2008; Bo Malmberg and Thomas Lindh, "Demographically based global income forecasts up to the year 2050", *International Journal of Forecasting*, vol. 23, No. 4, 2007.

[6] Allen Kelley and Robert Schmidt, "Evolution of recent economic-demographic modelling: A synthesis", *Journal of Population Economics*, vol. 18, No. 2, June 2005.

[7] Andrew Mason, editor, *Population Change and Economic Development in East Asia: Challenges Met, Opportunities Seized* (Stanford University Press, 2001); David E. Bloom, David Canning and Jaypee Sevilla, *The Demographic Dividend: A New Perspective on the Economic Consequences of Population Change* (Santa Monica, California, Rand Press, 2002).

[8] David E. Bloom and Jeffrey G. Williamson, "Demographic transitions and economic miracles in emerging Asia", *World Bank Economic Review*, vol. 12, No. 3, 1998.

[9] Andrew Mason, "Demographic transition and demographic dividends in developed and developing countries", in: *Proceedings of the United Nations Expert Group Meeting on Social and Economic Implications of Changing Population Age Structures*, Mexico City, 31 August-2 September 2005; Casio Turra and Bernardo Queiroz, "Intergenerational transfers and socio-economic inequality in Brazil: a first look", *Notas de Población*, No. 80, October 2005.

Table 3
Population growth rate and total fertility in 2000-2005 for developing countries by poverty level in 2005

	Percentage of people living on less than $1 a day around 2005[a]			
	Under 10	*10 to 19.9*	*20 to 39.9*	*40 or over*
Number of countries	44	13	23	33
Annual population growth rate (percentage)	0.7	1.3	1.9	2.5
Total fertility	2.1	3.2	3.8	5.4

Sources: The World Bank online Poverty Analysis Tool (*PovcalNet*), accessed on 14 October 2008; *World Population Prospects: The 2006 Revision* (United Nations publication, Sales No. E.07.XIII.2).

[a] The reference date varies by country, ranging from 1995 to 2007. For 102 of the 113 countries considered, the estimate refers to 2000 or later.

10. Analyses of the impact of declining fertility on poverty reduction have shown that demographic change alone accounted for a 14 per cent drop in poverty levels in the developing world during 1960-2000 and could produce an additional 14 per cent reduction during 2000-2015 if fertility decline accelerates in high-fertility countries.[4]

11. High fertility is associated with the persistence of poverty within countries because low-income groups generally have much higher fertility than high-income groups. Surveys in 56 developing countries showed that women in the lowest wealth quintile had, on average, two children more than women in the upper quintile.[10] In Africa, the difference was higher, at 2.8 children, and it was highest in Latin America and the Caribbean, where it amounted to 3.8 children. Similar differences exist when the education of women is the discriminating factor, because educational attainment and wealth are highly correlated. Data on 43 developing countries for the late 1990s indicate that women with no schooling had, on average, 2.3 children more than women with at least a secondary education.[11]

12. Consequently, reducing fertility among poor households can contribute to reducing poverty, both directly and indirectly. The higher the natural increase of the population living in poverty, the more rapidly its share of the population will rise, therefore increasing the overall poverty level. The higher rate of natural increase of those living on less than $1 a day puts an upward pressure on poverty levels, equivalent to between 10 per cent and 50 per cent of the rate of poverty reduction in the developing world between 1990 and 2001.[12] This impact is largest in Africa and Southern Asia.

[10] Davidson R. Gwatkin, Shea Rutstein, Kiersten Johnson, Eldaw Suliman, Adam Wagstaff, and Agbessi Amouzou, *Socio-Economic Differences in Health, Nutrition and Population within Developing Countries: An Overview* (Washington, D.C., The World Bank, 2007).

[11] Shea Oscar Rutstein, *Fertility Levels, Trends and Differentials 1995-1999*. DHS Comparative Reports No. 3 (Calverton, Maryland, ORC Macro, December 2002).

[12] Martin Ravaillon, "On the contribution of demographic change to aggregate poverty measures for the developing world", *World Bank Policy Research Working Paper*, No. 3580, The World Bank, April 2005.

13. High fertility among the poor can contribute to the intergenerational reproduction of poverty. The more children a household has, the fewer resources will be available for each and the less likely that children may get an adequate education. By having fewer children, poor households would be able to invest more on the nutrition, health and education of each child. When poor households are unable to realize their reproductive goals because they lack access to family planning, policies to improve such access are a useful adjunct to other policies aimed at reducing poverty.

14. Generally, the Governments of countries experiencing high population growth are concerned about the implications of that growth.[13] Thus, among the 11 countries whose populations were growing at 3 per cent or more annually during 2005-2010, 9 — Benin, Burundi, Eritrea, Jordan, Liberia, Mali, the Niger, Timor-Leste and Uganda — viewed their population growth rates as too high and all but Timor-Leste had adopted policies to reduce population growth. The other two, Afghanistan and the Democratic Republic of the Congo, considered their growth rates satisfactory and had no policies to influence them. Among the 36 countries with annual growth rates ranging from 2.0 to 3.0 per cent, 72 per cent considered them as too high and 67 per cent had adopted policies to lower them. Even among the 66 countries with more moderate growth rates, ranging from 1.0 to 2.0 per cent, 48 per cent considered them to be too high and most of these had adopted policies to lower them. In addition, among the 82 countries whose growth rates were below 1.0 per cent annually, just 32 per cent reported intervening to increase population growth.

B. Eradicating hunger

15. Poverty and hunger are closely intertwined because, although there is enough food to feed the 6.8 billion people on Earth, poor people are priced out of the food market, all the more so because, after years of relative stability, the prices of major staple foods rose sharply between 2006 and the first half of 2008.[14] Consequently, the number of undernourished people is reckoned to have increased by 40 million in 2008 alone, to reach 963 million, up from 923 million in 2007 and 848 million in 2003-2005,[15] making it more difficult to reach the target of halving by 2015 the proportion of people who suffer from hunger (Millennium Development Goal 1). Although food prices have been declining recently, the food crisis of 2008 made evident the vulnerabilities of many populations. The crisis resulted from increases in the demand for food that were not matched by increases in food supplies. Rising demand stems from population growth as well as from rising incomes and changing dietary patterns in developing countries, particularly in China. The slowing growth

[13] *World Population Policies 2007* (United Nations publication, Sales No. E.08.XIII.8).

[14] Between January 2006 and March 2008 world food prices soared 68 per cent. Wheat prices doubled between April 2007 and March 2008, while rice prices tripled between January and April 2008 as reported in Quentin Wodon and Hassan Zaman, "Rising food prices in sub-Saharan Africa: Poverty impact and policy responses", *World Bank Policy Research Working Paper*, No. 4738, 2008.

[15] Food and Agriculture Organization (FAO), *The State of Food Insecurity in the World* 2008, http://www.fao.org/docrep/011/i0291e/i0291e00.htm accessed on 20 December 2008; FAO, Committee on World Food Security, *Assessment of the World Food Security* and *Nutrition Situation*, thirty-fourth session, 14-17 October 2008.

of the food supply is due to many factors, including recent increases in the cost of seeds and fertilizer as energy prices soared, long-term underinvestment in rural infrastructure and agricultural development in many developing countries, growing constraints in access to land and water, and the reallocation of land to the production of biofuels.[16]

16. Globally, population growth is a major determinant of the demand for food. According to FAO, calorie intake is expected to increase from a world average of 2,803 kcal per person per day in 1999 to 3,050 by 2030,[17] a 9 per cent increase per person. During that period the world population is projected to rise from 6.0 billion to 8.3 billion, leading to a global increase of nearly 50 per cent in the caloric demand, 76 per cent of which is attributable to increases in the number of people.

17. At the country level, higher natural increase among the poor can contribute to increase the levels of hunger and undernutrition just as it can contribute to increase poverty levels. Because low-income households tend to have higher fertility than those with higher incomes, they usually have to allocate a higher proportion of their incomes to food and are particularly vulnerable to rising food prices or costs of food production. Thus, higher food prices have had more serious impacts on developing countries whose populations are growing rapidly and where poverty was high before the crisis. Between 2005 and 2007, rising food prices have increased poverty levels by about 4.5 percentage points in low-income countries, implying that an additional 105 million people have fallen into poverty.[18]

18. Rising food prices have resulted in 41 million additional undernourished people in Asia and 24 million in sub-Saharan Africa between 2003-2005 and 2007, the two regions that in 2003-2005 accounted for 89 per cent (750 million) of the hungry people in the world.[19] Increases in undernutrition, though smaller in magnitude, occurred in all other developing regions and in Latin America they erased all progress made since 1995. Clearly, policies to address the effects of food price shocks should give priority to the immediate protection of the most vulnerable households and individuals, including women and children, in order to achieve Millennium Development Goal 1. But longer-term responses need to take account of how population policies can be part of a coordinated response to promote sustainable livelihoods and buttress development prospects for all by helping households to avoid poverty traps.

III. Achieving universal education

19. Achieving universal primary education by 2015 and extending education for all, boys and girls, at the secondary and higher levels are goals established by the Programme of Action (paras. 11.6, 11.8, and 4.18), objectives echoed by the

[16] Joachim von Braun and others, "High food prices: The what, who, and how of proposed policy actions", *International Food Policy Research Institute Policy Brief*, May 2008, http://www.ifpri.org/PUBS/ib/FoodPricesPolicyAction.pdf.

[17] *World Agriculture: Towards 2015/2030, Summary Report* (Rome, FAO, 2002).

[18] Maros Ivanic and Will Martin "Implications of higher global food prices for poverty in low-income countries", *World Bank Policy Research Working Paper* No. 4594, 2008.

[19] FAO, Committee on World Food Security, *Assessment of the World Food Security* and *Nutrition Situation*, thirty-fourth session, 14-17 October 2008.

Millennium Development Goals. Much progress has been made towards achieving universal primary education (Millennium Development Goal 2). In 2006, primary school enrolment in developing countries reached 88 per cent. Nevertheless, inequalities in access to education, related in part to family size, continue to pose challenges for the achievement of that goal. At both the household and the country levels, investment in the education of children is less likely to be sufficient when the number of children is large. Sustained high fertility results in rapidly increasing numbers of school-age children, which translate into increasing demands on education systems and families.

20. Countries with the worse education indicators tend to have high proportions of children and high population growth rates. Thus, in the 29 countries with net enrolment ratios in primary school below 80 per cent, children under age 15 accounted for 42 per cent of the population in 2005 and the population growth rate averaged 2.3 per cent annually (see table 4). Similarly, in the 19 countries where over 20 per cent of persons aged 15-24 were illiterate in 2006, children accounted for 42 per cent of the population and the growth rate averaged 2.4 per cent. In contrast, the 47 countries with net enrolment ratios in primary school above 95 per cent and the 74 countries with low percentages of illiterate youth (below 5 per cent) had lower proportions of children (25 per cent of the population) and population growth rates averaging less than 1 per cent annually, yet another indication that slower population growth makes it easier to invest in education.

Table 4
Population growth rate in 2000-2005 and percentage of the population under age 15 in 2005 by selected education indicators

	Percentage of youth who can read and write			*Net enrolment ratio in primary education (percentage)*		
	Below 80	*Between 80 and 95*	*Above 95*	*Below 80*	*Between 80 and 95*	*Above 95*
Number of countries	19	23	74	29	63	47
Annual population growth rate (percentage)	2.4	1.9	0.9	2.3	1.0	0.8
Percentage of the population under 15	41.5	38.5	25.9	41.5	27.7	23.6

Sources: UNESCO Institute for Statistics, Online Data Centre (http://stats.uis.unesco.org), accessed on 7 October 2008; *World Population Prospects: The 2006 Revision* (United Nations publication, Sales No. E.07.XIII.2).

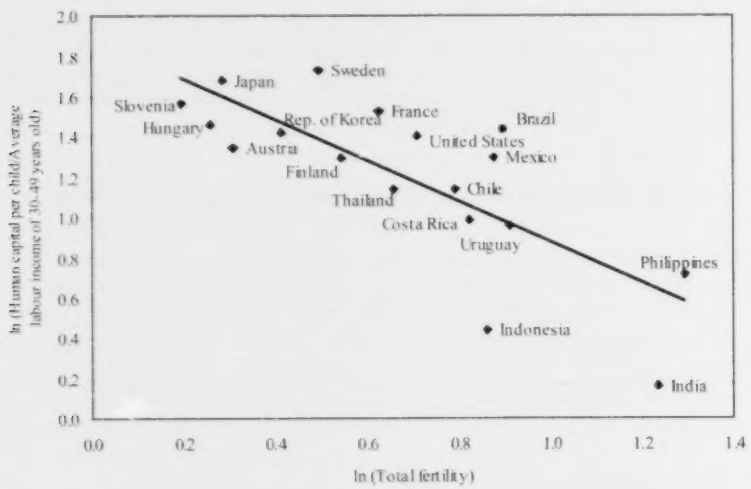
21. Intergenerational transfer accounts indicate that countries with lower fertility spend substantially more in the health and education of children than countries with higher fertility (see figure I). On average, countries with a total fertility of 3.0 children per woman spend about one third as much per child relative to labour income as a country with a total fertility of 1.0 child per woman.[20] Studies at the household level show that, on average, children born into large families have fewer

[20] Ronald Lee and Andrew Mason, "Fertility, human capital and economic growth over the demographic transition", National Transfer Accounts Working Paper WP08-02, 2008.

opportunities to receive schooling than children born into small families, especially in countries where most education costs are borne by parents.[21]

22. The level of education of women is a key determinant of fertility behaviour: women with higher education are more likely to use contraception and to have fewer children than women with fewer years of schooling. The maintenance of high fertility among poorer women generates a vicious circle whereby their children, particularly girls, are less likely to receive schooling and are more likely to have high numbers of children themselves. The Programme of Action makes a strong case for the achievement of education for all to ensure that the mutually reinforcing effects of increased education and smaller families can benefit development (chap. XI).

Figure I
Spending on education per child against total fertility, selected countries



Source: Derived from National Transfer Account data posted at http://www.ntaccounts.org

IV. Population and the goals related to health

23. The health of a population is an important determinant of economic growth. Empirical studies[22] show that health improvements provide a significant boost to economic growth in developing countries, implying that health, like education, is a fundamental component of human capital. Better health leads to higher income and vice versa, generating a beneficial feedback whereby improvements in health and rising incomes are mutually reinforcing. The Programme of Action recognizes this

[21] Cynthia Lloyd, "Investing in the next generation: the implications of high fertility at the level of the family", *Population and Development: Old Debates and New Conclusions* (New Brunswick, New Jersey: Transaction Publishers, 2004), pp. 181-202; Claudia Buchmann and Emily Hannum, "Education and stratification in developing countries: A review of theories and research", *Annual Review of Sociology*, vol. 27, 2001, pp. 77-102.

[22] Guillem López-Casasnovas and others, *Health and Economic Growth: Findings and Policy Implications* (Boston, Massachusetts, MIT Press, 2005); David E. Bloom and David Canning, "The health and wealth of nations", *Science*, vol. 287, No. 5456, 18 February 2000.

reality by setting ambitious objectives for the improvement of health. Underscoring the increase in longevity since 1950 as a major achievement, it calls for further increases in the healthy life-span and a reduction of disparities in life expectancy between and within countries (para. 8.3(b)) and sets the goal of increasing life expectancy to at least 75 years by 2015 or to at least 70 years in countries with high mortality in 1994 (para. 8.5).

A. Reducing child mortality

24. The Programme of Action calls for a reduction of under-five mortality to below 45 deaths per 1,000 live births in 2015 (para. 8.16), a goal that is more ambitious than the target under Millennium Development Goal 4 (two-thirds reduction between 1990 and 2015). Although child mortality in developing countries has been decreasing, passing from 103 to 74 deaths per 1,000 births between 1990 and 2007, its rate of decline would need to increase more than fivefold to reach the Millennium Development Goal 4 target by 2015 (see table 5). Sub-Saharan Africa, has seen its under-five mortality decline at a sluggish pace, which would need an eightfold increase to reach the established target.

Table 5
Under-five mortality by development group and sub-Saharan Africa, 1990, 2007 and 2015

	Under-five mortality (deaths per 1,000 births)			*Annual rate of decline (percentage)*	
Development group	*1990*	*2007*	*2015*	*Observed 1990-2007*	*Required 2008-2015*
World	93	68	31	1.8	9.8
Developing countries	103	74	34	1.9	9.6
Least developed countries	179	130	60	1.9	9.7
Sub-Saharan Africa	186	148	62	1.3	10.9

Source: *The State of the World's Children 2009* (New York, United Nations Children's Fund, 2008).
Note: Sub-Saharan Africa excludes the Sudan.

25. To reduce child mortality, the Programme of Action calls for the strengthening of primary health systems to provide prenatal and neonatal care and delivery assistance and for the promotion of exclusive breastfeeding of young infants, the provision of micronutrient supplementation and immunization against tetanus. It stresses the importance of combating major childhood diseases, particularly infectious and parasitic diseases, and preventing child malnutrition, especially among girls. The key actions[23] for its further implementation emphasize the need to expand immunization and the importance of using oral rehydration therapy in treating diarrhoea.

26. A review of health interventions in 68 countries, accounting for 97 per cent of all child deaths, found major progress in expanding coverage of interventions

[23] See General Assembly resolution S-21/2, annex.

provided through scheduled delivery, such as immunizations, vitamin-A supplementation and insecticide-treated bed-nets.[24] Less progress was found in strengthening health systems and, consequently, interventions requiring well-functioning clinical services, including the management of illnesses in newborn and older children, are still far from satisfying demand. Furthermore, combating malnutrition remains a major challenge: in 62 of the 68 countries considered, at least a fifth of all children under age 5 were stunted (i.e., they had a low height for their age because of chronic undernutrition).

27. Inadequate access to family planning is a further impediment to increasing child survival. Closely spaced births and pregnancies in adolescent and older women put children at increased risk of death. Defining children at high risk as those born to mothers under age 18 or older than 34, those born within 24 months of a preceding birth and those having a birth order of 4 or higher, the proportion of children at high risk is highly correlated with the level of under-five mortality, as data derived from 172 Demographic and Health Surveys conducted during 1985-2007 show (see figure II). Without controlling for other variables, the proportion of births in high-risk categories accounts for 41 per cent of the intercountry variation in under-five mortality. To the extent that women have children early or late in their reproductive lives or too closely spaced because they lack access to family planning, improving that access would reduce the risk of dying in childhood.

28. The inter-pregnancy interval is the time between a live birth or another pregnancy outcome and the start of the next pregnancy. Inter-pregnancy intervals longer than two years reduce child mortality. Analysis of the survivorship of over a million births recorded in Demographic and Health Surveys between 2000 and 2005 found that inter-pregnancy intervals ranging from 36 to 47 months were associated with the lowest risk of death in childhood.[25] If women waited at least 24 months after a live birth before conceiving again, under-five mortality would fall by 13 per cent, and it would drop by 25 per cent if women waited 36 months. Accordingly, WHO has issued new guidelines advising women to wait at least 24 months after a live birth before trying to conceive again.[26]

29. Governments of developing countries are particularly concerned about their high infant and child mortality: more than 80 per cent consider their levels unacceptable. Countries with high and increasing numbers of births face greater challenges in improving child health. Efforts to satisfy the unmet need for family planning can reduce significantly the costs of ensuring child health. In Ghana, for instance, satisfying the unmet need could reduce by 1.4 million the number of measles immunizations required between 2006 and 2015.[27] In order to accelerate the reduction of child mortality, particularly in low-income countries with high fertility,

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[24] Countdown Coverage Writing Group. "Countdown to 2015 for maternal, newborn, and child survival: the 2008 report on tracking coverage of interventions", *The Lancet*, vol. 371 (2008).

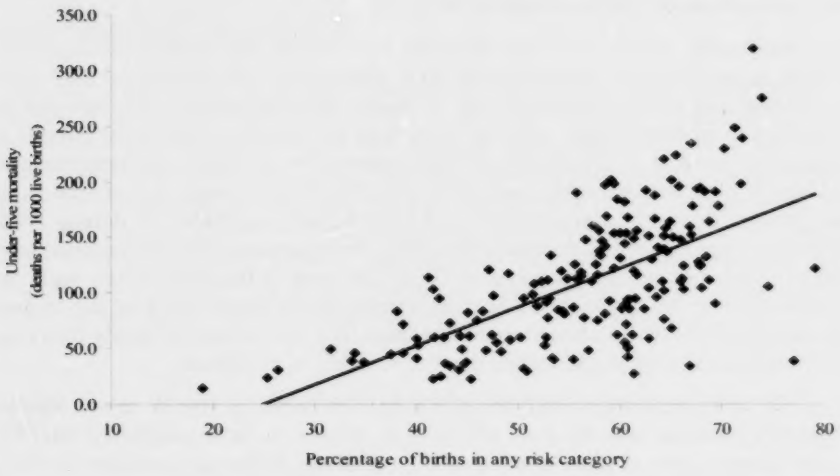
[25] Shea Oscar Rutstein, "Further evidence of the effects of preceding birth intervals on neonatal, infant, and under-five-years mortality and nutritional status in developing countries: evidence from the Demographic and Health Surveys". *DHS Working Papers*, No. 41 (Calverton, Maryland, Macro International Inc., 2008).

[26] World Health Organization, *Report of a WHO technical consultation on birth spacing* (Geneva: World Health Organization, 2006).

[27] Scott Moreland and Sandra Talbird, *Achieving the Millennium Development Goals: The contribution of fulfilling the unmet need for family planning* (Washington, D.C., United States Agency for International Development, 2006).

expanded access to family planning combined with reinvigorated efforts to expand interventions that improve child health is crucial to ensure the achievement of Millennium Development Goal 4.

Figure II
Under-five mortality versus percentage of births in risk categories, 1985-2007



Source: MEASURE DHS STATcompiler, http://www.measuredhs.com, accessed on 14 October 2008.

B. Combating malaria

30. Malaria causes 250 million episodes of illness annually and 900,000 deaths. Efforts are under way to achieve universal coverage of appropriate interventions by 2010, including the distribution of an estimated 720 million bednets treated with long-lasting insecticides,[28] intermittent residual spraying for vector control and intermittent preventive treatment of pregnant women in high-transmission areas to reduce the prevalence of malaria-related anaemia among them and the ensuing low birth weight of their children. Although the distribution of bednets has expanded rapidly, surveys conducted around 2006 in 18 African countries show that just 23 per cent of children and 27 per cent of pregnant women slept under bednets.[29]

31. Currently, only 18 per cent of pregnant women in high-transmission areas receive intermittent preventive treatment. To achieve universal coverage, 25 million pregnant women in Africa would require treatment annually. Initiatives to prevent or treat malaria during pregnancy work best when cooperation between national malaria control programmes and reproductive health programmes is close and when treatment against malaria is part of a comprehensive package of antenatal care. Since in several African countries much higher numbers of pregnant women receive antenatal care than get intermittent treatment, visits to antenatal care centres can be

[28] *The Global Malaria Action Plan* (Geneva, Roll Back Malaria Partnership, 2008).

[29] World Health Organization, *World Malaria Report 2008* (Geneva, Sales No. WHO/HTM/GMP/2008.1).

used to expand antimalarial treatment and distribute bednets. Ultimately, scaling up malaria control and prevention efforts requires expanding and improving health systems to support other interventions.

32. Reducing population growth through improved access to family planning can reduce the cost of malaria control. The costs of providing and maintaining bednets in 16 African countries could be reduced by between 4 and 19 per cent during 2005-2015 if the unmet need for family planning were satisfied.[27]

C. Controlling the HIV/AIDS epidemic

33. The Programme of Action was one of the first internationally agreed documents calling for concerted efforts to prevent the expansion of the HIV/AIDS epidemic and to support those affected by the disease (para. 8.29b). Despite major progress made in developing effective treatments for the disease, the epidemic remains one of the greatest challenges confronting the international community. Thus, the Governments of 81 per cent of developed countries and 93 per cent of developing countries consider HIV/AIDS a major concern. A multipronged strategy is being pursued to control the epidemic, focusing on prevention, care and treatment. Key elements of the strategy are the protection from discrimination and stigmatization of persons living with HIV, the establishment of HIV/AIDS coordination bodies at the national level, the development of multisectoral strategies, and the building of partnerships with civil society, including people living with HIV.

34. In 2008, 33 million people were living with HIV but trend estimates show encouraging signs of progress. Globally, the percentage of adults living with HIV levelled off as of 2000 and the number of new HIV infections has fallen in several countries. In 14 of 17 African countries with adequate survey data, the percentage of pregnant women aged 15-24 who are living with HIV has been declining since 2000-2001 and, in 7 countries, the drop in infections among women aged 15-24 has equalled or exceeded the 25 per cent reduction called for by the Declaration of Commitment on HIV/AIDS.[30]

35. The key actions for the further implementation of the Programme of Action[23] underscored in paragraph 68 the potential synergies between HIV prevention and reproductive health by calling on Governments to "ensure that prevention of and services for sexually transmitted diseases and HIV/AIDS are an integral component of reproductive and sexual health programmes at the primary health-care level". Most women in developing countries first establish contact with the health system when they seek antenatal care or family planning services. This contact provides a valuable opportunity to provide women with information and counselling on how to prevent HIV infection. Because the prevention of mother-to-child transmission of HIV is a priority, antenatal care should incorporate voluntary testing and counselling services to identify the women that need treatment and should include means of channelling HIV-positive women and their families to services that provide care, treatment and support. Although significant progress has been made in expanding the treatment of HIV-positive pregnant women to prevent mother-to-child

[30] Joint United Nations Programme on HIV/AIDS (UNAIDS), *Report on the Global HIV/AIDS Epidemic 2008* (Geneva, 2008).

transmission of HIV, in 2007 only 33 per cent of those women were receiving the necessary antiretroviral treatment. In a study of 51 countries affected by the epidemic, only 8 — Benin, Botswana, Brazil, Burkina Faso, Kenya, Rwanda, South Africa and Swaziland — were considered on track to achieve 80 per cent coverage of HIV-positive pregnant women by 2010,[24] as called for by the General Assembly at its special session on HIV/AIDS in 2001.

36. Because there is a high degree of overlap between the population at risk of unintended pregnancies and those at risk of exposure to HIV, family planning programmes can contribute to reduce the risk of infection. In addition, when women are already HIV-positive, family planning can enable them to avoid unwanted pregnancies. An analysis of the impact of family planning in preventing unwanted pregnancies among HIV-positive women concluded that it is a more cost-effective means of reducing HIV prevalence among children than provision of antiretroviral therapy to HIV-positive pregnant women.[31]

37. Expansion of antiretroviral treatment has been fast, yet in 2007, only 3 million of the 9.7 million people in developing countries who needed treatment received it. Moreover, much remains to be done to prevent the spread of HIV. In countries having conducted the necessary surveys, at most 40 per cent of men and 36 per cent of women aged 15-24 understood how HIV is transmitted and how to prevent infection, levels well below the 95 per cent target. Furthermore, groups especially vulnerable to infection continue to lack adequate access to HIV-prevention services.

D. Reducing maternal mortality

38. The Programme of Action calls for countries to reduce maternal mortality by half between 1990 and 2000 and by a further half by 2015 (para. 8.21), implying an overall reduction of 75 per cent between 1990 and 2015, as established under Millennium Development Goal 5. To achieve this goal a multipronged strategy is necessary. A woman's lifetime probability of surviving the reproductive years can be increased by reducing the number of pregnancies she has. Measures to reduce the risk of complications during pregnancy and delivery should be taken and access to adequate obstetric care must be improved to ensure that, if complications arise, the risk of dying during delivery is minimized. In addition, providing trained health assistance to manage the complications of abortion and offering post-abortion counselling, education and family planning in order to prevent repeated abortions are also required. Lastly, delaying marriage and preventing pregnancy among very young women reduce their risk of maternal death, as do strategies to prevent their exposure to HIV.

39. Reliable data to assess levels and trends in maternal mortality are lacking, particularly in developing countries where maternal mortality is high. It is estimated that 536,000 women died in 2005 because of maternal causes, 99 per cent of whom died in developing countries.[32] In 14 countries, mostly in sub-Saharan Africa, maternal mortality was higher than 1,000 deaths per 100,000 live births. Whereas average maternal mortality in the less developed regions was estimated at

[31] Heidi W. Reynolds and others, "The value of contraception to prevent perinatal HIV transmission", *Sexually Transmitted Diseases*, vol. 33, No. 6, 2006.

[32] *Maternal mortality in 2005: estimates developed by WHO, UNICEF, UNFPA and the World Bank* (Geneva, World Health Organization, 2007).

450 deaths per 100,000 births in 2005, that in the more developed regions was 11 (table 6). Africa had the highest maternal mortality, at 820 deaths per 100,000 births.

Table 6
Maternal mortality by major area, 1990 and 2005

	Maternal mortality (deaths per 100,000 live births)		*Average annual rate of reduction (percentage)*	
Major area	*1990*	*2005*	*Observed 1990-2005*	*Required 2005-2015*
World	430	400	0.5	13.1
More developed regions	17	11	2.9	9.5
Less developed regions	480	450	0.4	13.2
Least developed countries	900	870	0.2	13.5
Other less developed countries	380	310	1.4	11.8
Africa	830	820	0.1	13.7
Asia	400	320	1.5	11.6
Europe	23	13	3.8	8.2
Latin America and the Caribbean	180	130	2.2	10.6
North America	8	10	-1.5	16.1
Oceania	210	180	1.0	12.3

Source: *Maternal mortality in 2005* (World Health Organization, Geneva, 2007).
Note: Estimates for 1990 and 2005 are based on the same methodology. Rates of reduction have been calculated from those estimates.

40. Little progress has been made in reducing maternal mortality in developing countries. Between 1990 and 2005, maternal mortality in less developed regions declined by 0.4 per cent annually, far below the 13 per cent annual decline required to achieve Millennium Development Goal 5. In Africa, maternal mortality has remained virtually unchanged. Even in Latin America and the Caribbean, where maternal mortality has declined by 2.2 per cent annually, this rate falls far short from the 10.6 per cent needed to attain Millennium Development Goal 5. A major reason for these slow declines is that prevention of maternal mortality demands well-functioning health systems, able to provide care during the antenatal period, at delivery and during the post-partum and able to ensure access to emergency obstetric interventions when complications arise. While health systems improve, increasing access to skilled birth attendants is a crucial first step in preventing maternal deaths.[33]

41. Because the lifetime risk of maternal mortality depends on the number of pregnancies a woman has, access to family planning that allows women to avoid mistimed or unwanted pregnancies can reduce maternal mortality.[34] Thus, between

[33] Jon Rohde and others, "30 years after Alma-Ata: has primary health care worked in countries?" *The Lancet*, vol. 372, 2008.

[34] Stan Bernstein and Charlotte Juul Hansen, *Public Choices, Private Decisions: Sexual and Reproductive Health and the Millennium Development Goals* (New York, United Nations Development Programme, 2006).

25 and 40 per cent of maternal deaths could be eliminated if unplanned and unwanted pregnancies were prevented.[35] Nearly 52 million unintended pregnancies could be averted annually if the unmet need for family planning were satisfied, resulting in the prevention of 142,000 maternal deaths.[36] In addition, by preventing unwanted pregnancies via contraception, fewer women would resort to abortion under unsafe conditions. Unsafe abortion causes about 13 per cent of maternal deaths annually and nearly all those deaths are preventable.[37]

42. With fewer pregnancies, the costs of providing safe motherhood services to those giving birth would be lower. In 16 African countries, success in preventing unplanned or unwanted pregnancies could produce savings ranging from 4 to 21 per cent of the cumulative costs of implementing a safe motherhood programme between 2005 and 2015.[27] Furthermore, the savings on maternal care would generally surpass the costs of expanding family planning programmes.

E. Ensuring reproductive health

43. At the 2005 World Summit, heads of State and Government committed themselves to achieving universal access to reproductive health by 2015, recognizing that it could contribute to reducing maternal mortality, improving maternal health, reducing child mortality, promoting gender equality, combating HIV/AIDS and eradicating poverty. The Programme of Action defines reproductive health as a state of complete physical, mental and social well-being and not merely the absence of disease or infirmity, in all matters relating to the reproductive system and to its functions and processes. Reproductive health therefore implies that people have the capability to reproduce and the freedom to decide if, when and how often to do so. Implicit in this last condition is the right of men and women to be informed and have access to safe, effective, affordable and acceptable methods of family planning (para. 7.2).

44. Globally, the percentage of women aged 15-49, married or in union and using contraception increased from 56 per cent in 1993 to 63 per cent in 2003, implying that 716 million women were using contraception in 2003. Contraceptive prevalence is high in almost all major areas: 73 per cent in Northern America, 71 per cent in Latin America and the Caribbean, 68 per cent in Asia and Europe, and 60 per cent in Northern Africa (excluding the Sudan). However, very low levels characterize sub-Saharan Africa (22 per cent) and the developing regions of Oceania (27 per cent). Sub-Saharan Africa, in particular, has failed to reach the contraceptive levels projected in 1994 (31 per cent), which guided the funding recommendations in the Programme of Action. Furthermore, in 60 per cent of the 47 countries in sub-Saharan Africa having the required data, contraceptive prevalence remains below 25 per cent. Contraceptive prevalence is especially low in Eastern Africa, Middle Africa and Western Africa, where fertility remains well above 5 children per woman (see figure III). Indeed, contraceptive prevalence is highly correlated

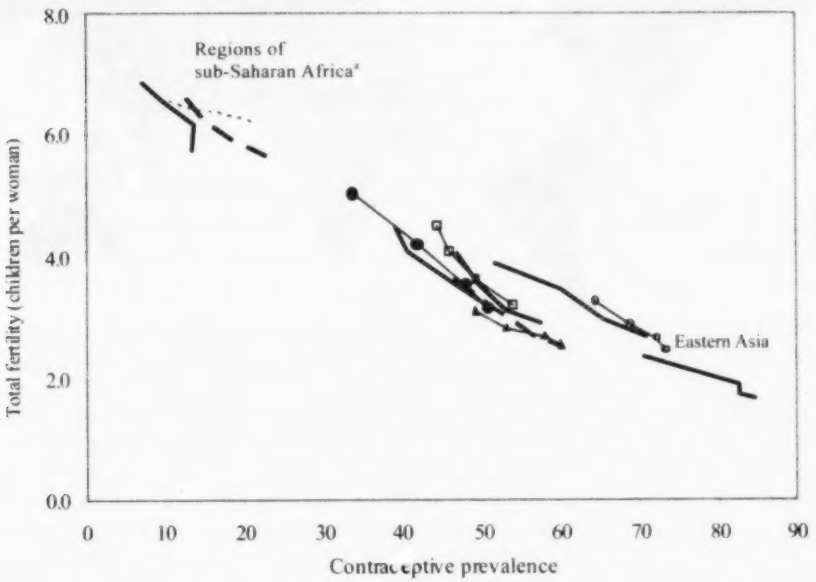
[35] Oona M. R. Campbell and Wendy J. Graham, "Strategies for reducing maternal mortality: getting on with what works", *The Lancet*, vol. 368, 2006.

[36] Michael Vlassoff and others, "Assessing costs and benefits of sexual and reproductive health interventions" *Occasional Report No. 11*, Alan Guttmacher Institute, 2004.

[37] World Health Organization, *Unsafe abortion: Global and Regional Estimates of the Incidence of Unsafe Abortion and Associated Mortality in 2003* (Geneva, WHO, 2007).

with total fertility and most countries with increases in contraceptive prevalence have experienced fertility reductions.

Figure III
Total fertility versus contraceptive prevalence in developing regions, 1985-2005



Source: *World Contraceptive Use 2007* (United Nations publication, Sales No. E.08.XIII.6).
[a] Eastern Africa, Middle Africa and Western Africa, only.

45. Globally, modern contraceptive methods[38] account for most contraceptive use. In 2003, 56 per cent of women aged 15-49 who were married or in union relied on modern contraceptive methods, up from 50 per cent in 1993. Use of modern methods surpassed 50 per cent in most countries in the Americas, Asia and Europe (see figure IV), but it was a low 15 per cent in sub-Saharan Africa and 21 per cent in the developing regions of Oceania. The use of traditional methods of contraception,[39] which are generally less effective in preventing pregnancy, is relatively high in Eastern Europe, Middle Africa and Western Africa. To the extent that the high prevalence of traditional methods is the result of constraints in accessing modern methods, it indicates that efforts to improve the accessibility and affordability of modern methods are still necessary to ensure universal reproductive health.

[38] Modern contraceptive methods include sterilization (female or male); hormonal pills, injectables and implants; intra-uterine devices (IUDs); condoms; and vaginal barrier methods.
[39] Traditional methods include rhythm, withdrawal, breastfeeding, douching and various folk methods.

Figure IV
Percentage of women aged 15-49, married or in union, using a modern contraceptive method, 2005

Source: *World Contraceptive Use 2007* (United Nations publication, Sales No. E.08.XIII.6).

46. Despite the high contraceptive prevalence achieved so far, there are still an estimated 106 million married women in developing countries with an unmet need for family planning,[40] including 66 million in Asia, 30 million in Africa, and 10 million in Latin America and the Caribbean. In India alone, 27 million married women have an unmet need for contraception. Other countries with high numbers of married women with unmet need include Pakistan, with more than 8 million, and Bangladesh, Ethiopia, Indonesia and Nigeria, each with over 3 million. In relative terms, unmet need is highest in most of sub-Saharan Africa (table 7) and in the least developed countries. Nearly a quarter of the countries in Africa with data available have unmet need levels surpassing 30 per cent, and about half have levels ranging from 20 to 30 per cent. In contrast, in Asia, Europe and Latin America and the Caribbean, the majority of countries with the required data display levels of unmet need below 20 per cent. The exceptions are mainly the least developed countries in those major areas, including Cambodia, Haiti, the Lao People's Democratic Republic, Nepal and Yemen, all of which had unmet need levels above 25 per cent, and Azerbaijan, Belize, Bolivia, Bulgaria, Guatemala and Pakistan, with unmet need levels ranging from 20 to 30 per cent.

[40] Women with unmet need are those who are fecund and sexually active but are not using any method of contraception and report not wanting any more children or wanting to delay the next pregnancy. This measure of unmet need is a robust indicator of additional demand for contraception because it reflects the disjuncture between reproductive intentions and contraceptive behaviour.

Table 7
Trends in unmet need for family planning, developing regions, 1995 and 2005

	Unmet need (percentage)		*Annual decline (percentage points)*
	1995	*2005*	
Northern Africa	16.3	10.4	0.59
Sub-Saharan Africa	25.7	24.1	0.16
South-Eastern Asia	12.8	11.1	0.17
Southern Asia	19.1	14.8	0.43
Western Asia	16.4	12.2	0.42
Latin America and the Caribbean	12.4	10.5	0.19

Source: *The Millennium Development Goals Report 2008* (New York, United Nations, 2008).
Note: These regions are consistent with those used to report on Millennium Development Goals targets.

47. Since the 1990s, unmet need for family planning has generally declined, partly because of concerted efforts by Governments and the international community to make modern contraceptive methods more widely available. Substantial declines were achieved by Northern Africa, Southern Asia and Western Asia (see table 7). Average annual declines were slower in South-Eastern Asia and Latin America and the Caribbean, partly because both regions had already reached moderate levels of unmet need by 1995. The slowest decline was experienced by sub-Saharan Africa, where unmet need remains high. Furthermore, in four countries of sub-Saharan Africa — Benin, Chad, Mali and Uganda — unmet need increased.

48. While unmet need has generally been declining, total demand for family planning, defined as the sum of unmet need plus current contraceptive use, has been increasing in most countries. The pace of increase has been particularly rapid in Eastern Asia and South-Central Asia, averaging 1 percentage point per year. In comparison, the increase in sub-Saharan Africa has been moderate, at 0.6 percentage points per year, although rapid increases in demand have been recorded in selected countries in the region. Thus, Mozambique, Namibia, Uganda and Zambia have seen demand rise by more than 1.5 percentage points per year. Nevertheless, total demand for family planning remains low in sub-Saharan Africa, at less than 50 per cent, especially in comparison to that in Northern Africa (65 per cent), Asia (75 per cent), and in Latin America and the Caribbean (80 per cent). In addition, in 79 per cent of the 36 countries in sub-Saharan Africa having the required data, 59 per cent or more of the unmet need for family planning stemmed from the desire of women to delay their next pregnancy rather than from their wish to stop childbearing altogether. In contrast, the majority of unmet need in the additional 44 developing countries was associated with the desire of women to stop childbearing. Only in four countries outside sub-Saharan Africa — Albania, the Dominican Republic, Guatemala and Timor-Leste — did 55 per cent or more of unmet need stem from the desire of women to delay a future pregnancy.

49. *During the transition from high to low fertility, unmet need for family* planning is low at first, when large families are the norm, increases as fertility starts declining and drops when low fertility is achieved. Because fertility has started to decline in most of the countries lagging behind in the transition, countries with high

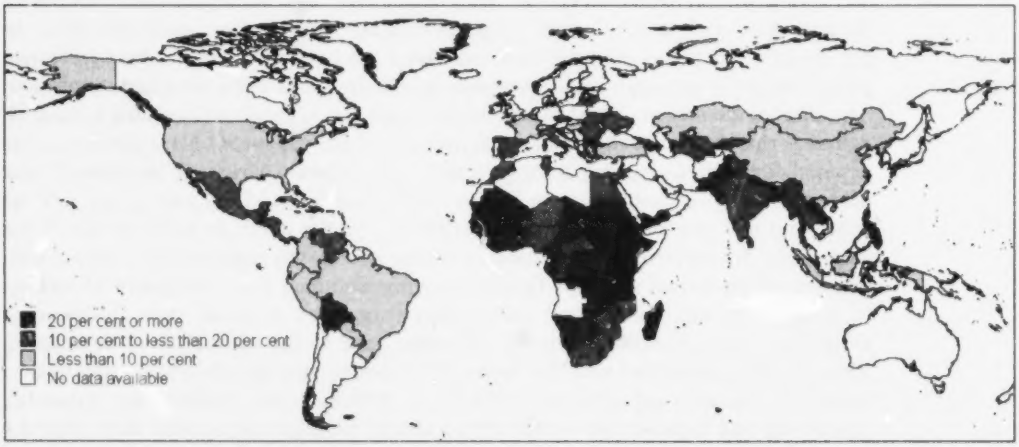
fertility are likely to have high levels of unmet need. The data available corroborate this expectation: among the 28 countries with data on unmet need referring to 2000 or later and a total fertility of at least 4.0 children per woman, 82 per cent had levels of unmet meet surpassing 20 per cent. Satisfying the need for family planning will speed the transition to lower fertility in such countries.

50. Women face several barriers in satisfying their unmet need for family planning. In Benin, Burkina Faso, Ethiopia, Mali, Mozambique, Nepal, Peru and Uganda, for instance, between 10 per cent and 19 per cent of women with unmet need cited lack of services or difficulties accessing them as the main reason for not using contraception. Lack of awareness and information about family planning methods was another common cause of non-use, as reported by between 10 per cent and 15 per cent of women with unmet need in seven African countries and in Bolivia. The high cost of contraceptives was also mentioned but by lower proportions of women (12 per cent in Burkina Faso was the maximum).

51. Government efforts to provide access to family planning and modern contraceptive methods have been an important determinant of reproductive behaviour. Among developing countries, such support has risen steadily. In 2007, 86 per cent of developing countries provided direct support for family planning, up from 82 per cent in 1996.[13] Direct support entails the provision of services through government-run facilities, including hospitals, clinics, health centres, or through government fieldworkers. Among developed countries, where concern about low fertility is common, direct support to facilitate access to modern contraceptive methods has been declining. In 2007, 39 per cent of Governments of developed countries provided such support, down from 58 per cent in 1996.

Figure V

Percentage of women aged 15-49 who are married or in union and who have unmet need for family planning



Source: *World Contraceptive Use 2007* (United Nations publication, Sales No. E.08.XIII.6).

V. Promoting gender equality and empowering women

52. Both the Programme of Action and the Millennium Declaration call for the achievement of gender equality and the empowerment of women, recognizing that both are key to combating poverty, hunger and disease and in achieving sustainable development. The Programme of Action sets a broad agenda for the improvement of the status of women, stressing the importance of increasing their equal participation and equitable representation at all levels of the political process; improving women's ability to earn an income in varied occupations so that they can become economically self-reliant, ensuring their equal access to the labour market and social security, and ensuring their equal rights to buy, hold and sell property and land, to obtain credit and negotiate contracts in their own name, and to exercise their right to inheritance (paras. 4.4 and 4.6).

53. The Programme of Action also stresses that education is a crucial means of empowering women with the knowledge and skills necessary to participate fully in the development process (para. 4.2) and urges Governments to ensure the widest and earliest possible access of girls and young women to secondary and higher levels of education, and to vocational education and technical training so as to close the gender gap in primary and secondary education by 2005 (para. 11.8), objectives consistent with the target of eliminating gender disparity in primary and secondary education by 2015 under Millennium Development Goal 3. Important progress has been made in closing those gaps. Between 2000 and 2006, the primary school enrolment of girls increased more than that of boys in all developing regions and two thirds of developing countries have achieved gender parity in primary education. However, girls still account for 55 per cent of the children who are out of school in developing countries and in Northern Africa, sub-Saharan Africa, Oceania and Western Asia the enrolment of girls in primary school still falls below that of boys.[41] Those disparities widen with respect to secondary school enrolment: in those four regions, the ratio of girls' secondary school enrolment to that of boys varies from 80 to 88, still far below the target of 100.

54. Delaying marriage and the onset of childbearing is important to ensure that girls and young women remain in school as long as possible and gain the skills necessary to improve their labour market prospects. Thus, a study in Latin America and the Caribbean showed that there would be significant increases in the secondary school enrolment of female adolescents if dropping out of school because of pregnancy could be avoided.[42] Reducing adolescent fertility is a major objective of Governments: among the 185 expressing a view on the issue, 91 per cent were concerned about their level of adolescent fertility, including virtually all the Governments of countries in Latin America and the Caribbean and most in Africa. In addition, 80 per cent had policies or programmes to address adolescent fertility. Despite such commitment, the reductions of adolescent fertility achieved in developing countries between 1990 and 2000 have not been replicated after 2000 and adolescent fertility remains high in many developing regions, especially in sub-Saharan Africa (119 births per 1,000 women aged 15-19), Latin America and the Caribbean (73), Oceania (63), South Asia (54) and Western Asia (50). Thus, even in regions where overall fertility is low, adolescent fertility has failed to decline

[41] *The Millennium Development Goals Report 2008* (New York, United Nations, 2008).

[42] Parfait Eloundou-Enyegue and C. Shannon Stokes, "Teen pregnancy and gender inequality in education: A contextual hypothesis", *Demographic Research*, vol. 11, 2004.

commensurately, partly because of early marriage and the barriers faced by young women to access family planning.

55. The Programme of Action recognizes that it is essential for all women to have access to affordable, acceptable and convenient reproductive health care in order to achieve control over their reproductive lives and the timing of their pregnancies to fit their family, education and work plans. Realizing the reproductive rights of women is therefore essential for their empowerment. Thus, the Programme of Action stresses that both women and men should "have access to the information, education and services needed to achieve good sexual health and exercise their reproductive rights and responsibilities" (para. 7.36 (b)). It further emphasizes men's shared responsibility and promotes their active involvement in responsible parenthood; sexual and reproductive behaviour; prenatal, maternal and child health; prevention of unwanted and high-risk pregnancies; prevention of sexually transmitted diseases, including HIV; shared control and contribution to family income, children's education, health and nutrition; and recognition and promotion of the equal value of children of both sexes (para. 4.27). Full implementation of the Programme of Action entails, therefore, both the empowerment of women in all spheres of life and a greater involvement of men in the exercise of reproductive rights and responsibilities.

56. A correlate of these objectives is that there should be zero tolerance for gender-based violence that puts the health and lives of women at risk. The social and economic costs of violence against women are enormous. Gender-based violence is more common in societies with gender norms that restrict women's autonomy and where women are subject to restrictive laws on divorce and on ownership and inheritance of property. Violence against women is associated with higher probabilities of contracting sexually transmitted diseases, including HIV, and of having unintended pregnancies and adverse pregnancy outcomes, including miscarriage, stillbirths and low birth weight. Abused women lose their self-confidence and see their education and employment opportunities curtailed. Eliminating gender-based violence would therefore not only eliminate its adverse effects on the health of women and children but also enhance their education and labour force participation.

VI. Ensuring environmental sustainability

57. During the twentieth century, the world population quadrupled and the urban population increased thirteenfold. This rapid growth and redistribution of the population occurred concomittantly with a fourteenfold increase in total production, a doubling of land under cultivation, a fivefold increase in irrigated area, a ninefold increase in water use and a thirteenfold increase in energy consumption,[43] which, together, are having unprecedented impacts on the environment, causing climate change, land degradation and loss of biodiversity.[44] Although population growth is

[43] Peter Marcotullio, "Socio-ecological systems and urban environmental transitions in the Asia-Pacific region", paper presented at the United Nations Expert Group Meeting on Population Distribution, Urbanization, Internal Migration and Development, New York, 21-23 January 2008.

[44] United Nations Environment Programme, *Global Environment Outlook: Environment for Development 4* (GEO-4), 2007.

but one of the factors leading to the changes under way, slowing population growth can buy time to adapt to those changes and, particularly in low-income countries, reduce the efforts needed to mitigate their negative effects. Reducing population growth is also a means of ensuring that, as the Programme of Action calls for, the needs of present generations are met without compromising the ability of future generations to meet their own needs (paras. 3.3 and 3.4 (a)).

58. The use of natural resources and access to energy are essential for development, but their by-products have proven to be detrimental to the environment. The Intergovernmental Panel on Climate Change has concluded that increases in emissions of greenhouse gases and especially of carbon dioxide (CO_2) are responsible for climate change. Until recently, countries of the Organization for Economic Cooperation and Development (OECD) generated the majority of CO_2 emissions but around 2005, CO_2 emissions from non-OECD countries surpassed those from OECD countries and are expected to continue outstripping the former because of both the rapid economic growth of emerging economies and higher population growth in non-OECD countries.[45] However, the relation between population growth and increasing greenhouse gas emissions is not straightforward and the scenarios of future emission trends do not permit assessing the effects of population dynamics net of economic and technological changes. Furthermore, changing population age structures, increasing urbanization and changes in household size interact in affecting emissions.[46]

59. Maintaining adequate access to water for growing populations is a major concern. Today, 2.8 billion people live in river basins with some form of water scarcity[41] and water-stressed regions exist in every continent. In addition, 1.6 billion people live in areas where lack of human, institutional or financial capital limit access to water, particularly in much of Southern Asia and sub-Saharan Africa. Although 1.6 billion people have gained access to safe drinking water since 1990, in sub-Saharan Africa just 58 per cent of the population has such access and the slow progress made so far suggests that the region will not reach the target of halving by 2015 the proportion of people without access to safe drinking water (Millennium Development Goal 7). Eastern Asia has extended the provision of improved drinking water to 400 million additional persons since 1990 and all regions in Asia are on schedule to meet the Goal 7 target. Nevertheless, per-capita availability of fresh water in Asia declined by 40 to 60 per cent during 1955-1990 and most Asian countries are likely to face severe water shortages by 2025.[47] Because population growth increases demand for water in all sectors of the economy, including agriculture, moderating that growth will make it easier to conserve water, make the investments necessary to make water accessible and increase the time available for adaptation to future conditions.

60. In 2008, the number of urban dwellers surpassed the number of rural inhabitants and, in future, population growth will be concentrated mainly in the urban areas of developing countries. Because in most developing countries urban

[45] World Bank, "Development and Climate Change: A Strategic Framework for the World Bank Group", consultation draft, 2008.

[46] Brian C. O'Neill, "The role of demographics in emissions scenarios", report of the Intergovernmental Panel on Climate Change Expert Meeting on Emission Scenarios, 12-14 January 2005, Washington, D.C.

[47] Intergovernmental Panel on Climate Change, "Technical Working Paper VI", 2008.

dwellers have better access to services than rural inhabitants, rural-urban migration is a means of gaining access to those services. However, the rapid growth of urban settlements in some countries has strained the capacity of their Governments to provide adequate services to all urban dwellers and the number of slum-dwellers remains high, at 840 million persons or 37 per cent of the urban population of developing countries.[48] Nine out of 10 slum-dwellers lack adequate sanitation or live in crowded conditions. Improving access to sanitation is a low-cost intervention that can improve the lives and health of millions. Since 1990, an additional 1.1 billion people have gained access to improved sanitation facilities in developing countries but coverage still needs to be extended to 1.6 billion by 2015 to achieve the target of halving the proportion of people without access to sanitation (Millennium Development Goal 7).[41] In urban areas, improvements in sanitation have failed to keep pace with urban population growth, particularly in sub-Saharan Africa. Yet globally, 70 per cent of those without improved sanitation live in rural areas. Consequently, as the Programme of Action recommends, "while vast improvements in the urban infrastructure and environmental strategies are essential in many developing countries to provide a healthy environment for urban residents, similar activities should also be pursued in rural areas" (para. 9.4).

VII. Global partnership for development

61. The Programme of Action foresaw the need to mobilize additional financial resources from both domestic sources and donors in order to implement population-related programmes that would respond to its core recommendations. In particular, funding would be needed for four components of population programmes focusing on: (a) family planning services; (b) basic reproductive health-care services to improve maternal health; (c) prevention of sexually transmitted diseases, including HIV/AIDS, and (d) basic research and data on population and development, including capacity-building (para. 13.14). Estimates were provided for the cost of implementing these four components in developing countries and countries with economies in transition (para. 13.15) and it was expected that two thirds of the costs would be borne domestically and one third from external sources.

62. Recently, domestic expenditures for population activities have been increasing in all regions, having reached $23 billion in 2006. About 30 per cent of all domestic expenditures are devoted to the prevention and treatment of STDs and HIV/AIDS[49] but, in sub-Saharan Africa, 88 per cent of domestic spending goes to HIV/AIDS programmes. Donor assistance for population activities increased markedly after 2001, following a period of no growth that started in 1995. However, rising donor funding results mostly from increasing allocations to AIDS treatment, whereas donor support for family planning has declined. Between 1996 and 2005, per capita donor assistance devoted to family planning dropped by 80 per cent in sub-Saharan Africa, 70 per cent in Latin America and the Caribbean, nearly 65 per cent in Northern Africa and Western Asia, and 47 per cent in Asia and the Pacific (see figure VI).

63. Investment in family planning that allows women to have the number and spacing of children they want is likely to reduce fertility and be cost-effective. Thus,

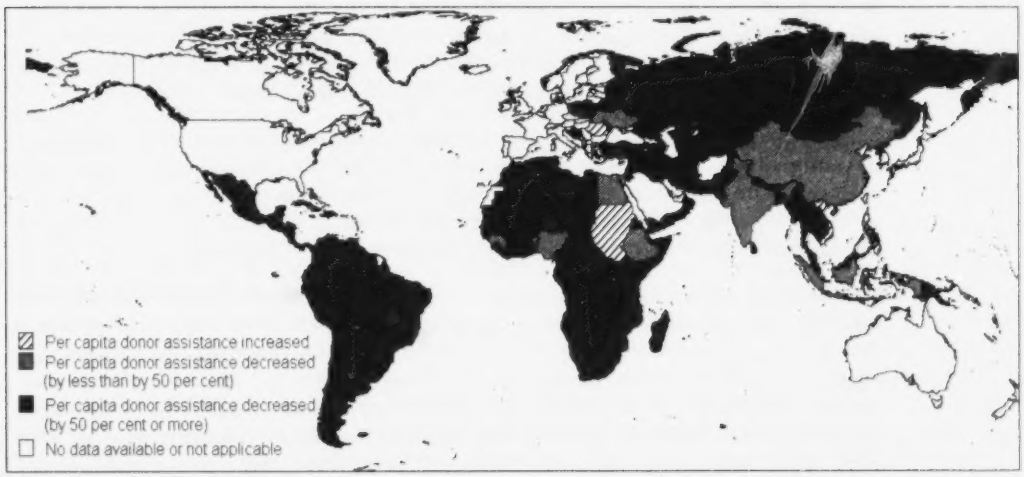
[48] See E/CN.9/2008/3, para. 54.

[49] See E/CN.9/2008/5, para. 22.

provision of a very basic package of health services costs $45 annually per person, well above current health spending in most low-income countries.[50] If fertility were reduced by 2015 to the levels envisioned in the low variant of the United Nations projections, the population of the least developed countries would be 21 million lower in 2015 than in the medium variant,[51] implying an annual savings approaching $1 billion by 2015.

64. Although new pledges to fund family planning have been made recently, funding is not keeping pace with rising demand, especially in the low-income countries, putting in jeopardy not only the attainment of universal reproductive health but also of all the other goals on health, gender and education that are dependent on achieving that target.

Figure VI
Percentage change in donor assistance for family planning programmes per woman aged 15-49, 1996 to 2006


Per capita donor assistance increased
Per capita donor assistance decreased (by less than by 50 per cent)
Per capita donor assistance decreased (by 50 per cent or more)
No data available or not applicable

VIII. Conclusions and recommendations

65. **The full implementation of the Programme of Action of the International Conference on Population and Development can make a significant contribution to the achievement of the internationally agreed development goals. Fifteen years after its adoption, gaps in implementation are particularly common in the least developed countries and most of those in sub-Saharan Africa and they have hindered progress in the achievement of crucial development goals, including the Millennium Development Goals. Since the 1970s, government policy buttressed by donor support has been successful in**

[50] Countdown Working Group on Health Policy and Health Systems, "Assessment of the health system and policy environment as a critical complement to tracking intervention coverage for maternal, newborn, and child health", *The Lancet*, vol. 371, 2008.

[51] The medium and low variants differ only in the projected fertility level. In 2015, projected fertility for the least developed countries is 3.69 in the low variant and 4.15 in the medium variant, a difference of 0.46 children per woman.

averting a global "population explosion" but population growth remains high in many low-income countries. High population growth resulting from sustained high fertility imposes increasing demands on existing resources and reduces the capacity of Governments to respond to new challenges.

66. Fertility decline reduces the proportion of dependants in a population, leading to a period where demographic change can boost economic growth if supported by measures to build human capital, generate jobs, increase savings and improve income distribution. Fertility decline can also contribute to reduce poverty and hunger, at both the national and household levels. Families with fewer children can invest more on the health, nutrition and education of each child. Intergenerational transfer accounts indicate that countries with lower fertility spend substantially more in the health and education of children than countries with higher fertility. Slower growth in the number of children makes it easier to achieve universal primary education.

67. High fertility is associated with the persistence of poverty within countries because low-income groups generally have higher natural increase than high-income groups. Consequently, reducing fertility among poor households can contribute to reduce poverty, both directly and indirectly. High fertility among the poor can contribute to the intergenerational reproduction of poverty.

68. Policies to address the effects of food price shocks should give priority to the immediate protection of the most vulnerable, including women and children. Longer-term responses should incorporate population policy as part of a coordinated response to promote sustainable livelihoods for all by helping households avoid the intergenerational reproduction of poverty.

69. Despite progress made in providing access to modern contraceptive methods to those who need them, an estimated 106 million married women in developing countries have an unmet need for family planning. Satisfying that need can contribute to reducing maternal mortality, improving maternal health, reducing child mortality, promoting gender equality, combating HIV/AIDS and reducing poverty. Yet, funding for family planning has not kept pace with increasing demand. Between 1996 and 2005, per capita donor assistance devoted to family planning dropped in most regions. In sub-Saharan Africa, the high prevalence of HIV/AIDS has meant that most domestic spending on reproductive health is devoted to AIDS treatment. Substantial increases in both domestic and external funding for family planning are necessary if reproductive health for all is to be assured by 2015.

70. Closely spaced births and pregnancies in adolescent and older women put children at increased risk of death. In order to accelerate the reduction of child mortality, particularly in low-income countries with high fertility, expanded access to family planning combined with reinvigorated efforts to expand interventions to improve child health is crucial to ensure the achievement of Millennium Development Goal 4.

71. The reduction of maternal mortality depends on ensuring that women have access to antenatal care during pregnancy, to trained health attendants during delivery and to emergency obstetric care if complications arise. Access to family planning, by allowing women to avoid mistimed and unwanted pregnancies, reduces their lifetime risk of maternal mortality. Moreover, fewer

pregnancies lower the overall cost of providing safe motherhood services to women giving birth.

72. **Antenatal care and family planning services should include the provision of information and counselling on HIV/AIDS as well as voluntary testing to identify women in need of treatment and to prevent mother-to-child transmission of HIV. Family planning can enable HIV-positive women to avoid unwanted pregnancies and thus reduce the prevalence of HIV among children.**

73. **In countries where malaria is endemic, antenatal care should include the provision of intermittent anti-malarial treatment for pregnant women and the distribution of insecticide-treated bed-nets. In the medium term, improved access to family planning can reduce the cost of malaria control by reducing the population at risk.**

74. **Achieving gender equality, equity and the empowerment of women is important in combating poverty, hunger and disease and in achieving sustainable development. Education is a crucial means of empowering women with the knowledge, skills and self-confidence necessary to participate fully in the development process. Delaying marriage and the onset of childbearing helps to ensure that girls and young women remain in school and gain the skills necessary to improve their labour market prospects. Secondary school enrolment of female adolescents would increase further if dropping out of school because of pregnancy could be avoided.**

75. **Although the relation between population growth and increasing greenhouse gas emissions is not straightforward and it is not yet possible to assess the effects of population dynamics net of other economic and technological changes, reducing population growth can buy time to adapt to those changes and, particularly in low-income countries, reduce the efforts needed to mitigate their negative effects.**

76. **Maintaining adequate access to water for a growing world population is a challenge. Because population growth increases the demand for water in all sectors of the economy, including agriculture, moderating that growth will make it easier to conserve water, make the investments necessary to make water accessible to more people and expand the coverage of sanitation to meet the targets set under Millennium Development Goal 7.**

77. **Asia's population is today just over 4 billion instead of surpassing the 6 billion mark, as it would have done had its fertility remained constant at 1970 levels, because 68 per cent of Asian women aged 15-49 who are married or in union use some method of contraception. In sharp contrast, contraceptive prevalence in sub-Saharan Africa is a low 22 per cent, having failed to reach the modest level of 31 per cent that was forecast in 1994 and served as basis for estimating the level of funding that would have been required to reach the goals and objectives set out by the Programme of Action. Such disparities in implementation hinder the achievement of the Millennium Development Goals. With scarcely six years to go to reach them, priority should be given to the reduction of those implementation gaps.**